

Clayton Local Board of Health.

Annual Report
OF THE
Medical Officer,

A. E. TUNSTALL, L.R.C.P., & L.R.C.S. ED.,
MEDICAL OFFICER OF HEALTH,

—✧— FOR THE YEAR 1893. —✧—

Thornton :

A. MITCHELL, PRINTER, BOOKBINDER. 65, MARKET STREET.

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1894.

CHURCH LINDEN HALL, N. H.

Annual Report

Medical Officer,

of the
United States Army.

FOR THE YEAR 1882.

By
J. M. HARRIS, M.D.,
Major, United States Army.

Clayton Local Board of Health.

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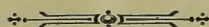
Annual Report

Medical Officer

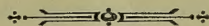
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for the year 1913

Clayton Local Board of Health.



ANNUAL REPORT OF THE MEDICAL OFFICER.



TO THE CLAYTON LOCAL BOARD OF HEALTH.

MR. CHAIRMAN AND GENTLEMEN,

I have much pleasure in presenting for your consideration, my Annual Report for the year ending 31st December, 1893. The year has not been marked by any severe epidemic of disease in your District; neither has there been any great Sanitary reform accomplished, but much useful work has been done which I hope will prove to be of great benefit to the Sanitation of the District.

POPULATION IN 1893.

I will first proceed to give you particulars of Statistics of Births and Deaths, and in order to make these fairly accurate, it is necessary to estimate the population to the middle of the year 1893. In the Spring of 1891, when the last Census was taken, the population of the Clayton Local Board District was 4707; and estimating by the rate of increase from the Census of 1881, to that of 1891, we shall have in the middle of 1893 a population of about 4800, this I think we may take as a fairly accurate estimate.

BIRTH RATE.

The Births registered as shown in Table B., were 122, but 10 of these were in the Workhouse, leaving 112 in the District, of which 59 were males, and 53 females, ; giving a Birth-rate equal to 23·3 per 1000, as against 23·5 in 1892. Of the 10 births in the Workhouse, 7 were males, and 3 females. Of the total 122 births, 11 were illegitimate, namely, 7 males, and 4 females.

DEATH RATE.

The Deaths registered during the year were 142 in number, of which 62 occurred in the Workhouse, leaving 80 for the District. Of these 38 were males, and 42 females, giving a Death-rate equal to 16·6 per 1000, against 15·3 in the year 1892. Of the 62 deaths in the Workhouse, 44 were males and 18 females.

DEATHS AT VARIOUS AGES.—As will be seen in Table A; of these, 80 deaths in your District, they occurred at the following ages :—

Under 1 year of age	...	13
From 1 to 5	„	9
„ 5 15	„	3
„ 15 25	„	5
„ 25 65	„	35
Over 65	„	15

DEATHS FROM VARIOUS CAUSES :—The causes of Death were as follows :—

From Scarlatina	.....	1
„ Whooping Cough	.....	2
„ Diarrhœa	.....	4
„ Rheumatic Fever	.....	1
„ Phthisis	.....	7
„ Bronchitis, Pneumonia, &c.	.....	13
„ Heart Disease	.....	4
„ Injuries	.....	3
„ Other Causes	.....	45

INFANT MORTALITY.—The rates of Infant, Zymotic, and other mortalities were therefore as follows:—Infant mortality, that is deaths of Children under One year of age, was equal to 116 per 1000 births, being the same as in 1892.

ZYMOTIC DEATH RATE.—The Death Rate from the principal Zymotic Diseases was equal to 1·4 per 1000 of population. In 1892 it was 1·3.

PHTHISIS DEATH RATE.—The Phthisis Death Rate was equal to 1·4 per 1000 of population. In 1892 it was 2·1.

RESPIRATORY DEATH RATE.—The Respiratory Death Rate was equal to 2·7 per 1000 of population, as against 2·9 in 1892.

INFECTIOUS DISEASES.

The number of cases of Infectious Diseases notified to me under the Infectious Diseases Notification Act, was 29. These were mostly composed of Scarlet Fever, of which there were 21.

SCARLET FEVER.—I may here remark that Scarlet Fever has existed in the District, with only short intermission, for the greater part of the past two years, for whereas in 1891, there was not a single case notified to me, from the 31st of May, 1892, I had cases notified regularly up to December the 18th, 1892. Then there were no more cases until March the 2nd, 1893, when again I had them regularly every month up to August 5th; for the remainder of the year there was only one case notified, and that was in November. There were most cases notified, viz:—9 in March, the first month of the epidemic. During this same period, Scarlet Fever had been very prevalent in Bradford, and the surrounding districts, so that it would have been strange had we missed it. As I have before remarked, I have no doubt that many cases go unnotified, the disease existing in such a mild form, that parents do not always deem it necessary to call in Medical assistance.

SMALL POX.—There were also 4 cases of Small Pox notified. Three of these occurring in February, were inmates of the Workhouse, and were isolated and treated there. The other case was in December, and I had him immediately conveyed to the Hospital at Thornton, where he recovered, and was discharged after 25 days isolation. I had his house thoroughly fumigated, and all bedding and clothing taken to the Hospital and disinfected in the Steam Disinfector there. His was a mild attack, and no other cases occurred in his family, or in the neighbourhood. As he had been for some time working in Bradford, in a district where there had been many cases, I have no doubt he contracted the disease there.

TYPHOID FEVER.—ERYSIPELAS.—There was also one case of Typhoid Fever in September, and three cases of Erysipelas.

DIARRHOEA.—In the month of September there was a great deal of Diarrhoea of a severe nature, but in that month only one case proved fatal, that was a man aged 56, who was severely ill for only a few hours before death. And as at that time the Cholera scare existed, and this case was decidedly suspicious, I had the house fumigated, much of the soiled bedding destroyed, and his clothing, other bedding and carpets sent to the Hospital, and disinfected.

INFLUENZA.—Influenza occurred about the end of November, and in the early part of December, during which period there were many acute attacks, but it soon disappeared again. There were only two deaths recorded from it, accompanied with Pneumonia.

SANITARY WORK.

SEWERAGE.—To pass on to Sanitary Work accomplished, as will be seen by referring to Table C., 120 yards of Culvert Sewer were made; this is in Clayton Lane where the old inefficient drain was taken up and a well-built Culvert Sewer laid in its place. Excepting for a few yards yet remaining to be done down this lane,

there is now a Main Sewer through this, the greater part of Clayton, sufficient to receive all the sewage from this part of the District. There are two parts of the District of which the sewerage is very bad, and for which, owing to different elevations, this sewer is of no use. I refer to Clayton Heights, and the Pasture Lane District. The latter District, which is growing rapidly, and in which the houses are of a good class, and of recent date, and which is very popular as a residential district, has very bad sewerage, and to make matters worse, this empties into a stream only a few yards below the houses. This will have to be remedied very soon, as the houses are rapidly extending towards this very stream. It will be a difficult and costly undertaking, as the sewer will have to pass under the Railway, but owing to the formation of the ground here, this is the only outlet that I can see to be possible.

SEWAGE DISPOSAL.—Then some plan of Sewage Disposal will have to be undertaken, for the Clayton Lane Main Sewer simply empties into a disused quarry, and from there, the sewage will permeate to, I know not where. Your Board are, I understand, considering an arrangement by which the Bradford Corporation will take the sewage, and as that is the only outlet for it, it will, I think, be better and cheaper than erecting sewage works of your own. Clayton Heights could then also be easily and inexpensively connected with the sewerage at Horton Bank Top.

SCAVENGING.—You have now had a full year's experience of the cleansing of the Ashpits by the Sanitary Staff, and I am able to give you figures showing the advantage and economy of this over the old style of letting it by contract. There is a total number of 464 Ashpits in the District, and during the year, Ashpits have been emptied 810 times; 960 loads having been taken away, at an estimated cost of £60. Under the contract system, you used to pay £95 per

year, and the yearly average number of loads removed was 730. These figures show well the greater efficiency and diminished expenditure of the new system. Formerly I had frequently to complain of the contractors not doing their work ; now I am pleased to say there is a great improvement in the condition of the Ashpits. Your Inspector deserves great praise for the way he has looked after this, as well as all his other duties ; and I am much indebted to him for the careful manner in which he has fumigated houses, and applied disinfectants, as well as enquiring into all nuisances, and his ready and efficient help to me at all times.

WATER SUPPLY—NUISANCES, &c.

Table C. also shows you many other works done, such as an extension of water supply, connecting house drains with main sewer, trapping and disconnecting of sinks, of which 29 have been done ; and of 29 nuisances reported during the year, 28 were abated.

SLAUGHTER HOUSES. — I have frequently inspected the 3 Slaughter Houses in the District, and I am pleased to say that they have been kept in a more satisfactory condition since the prosecution of the occupant of one of them two years ago.

I append Tables A. B. and C. duly filled up.

I have the honour to be, Gentlemen,

Your obedient servant,

A. E. TUNSTALL,

L.R.C.P., & L.R.C.S., Ed.,

Medical Officer of Health.

Thornton, March 1st, 1894.

122 Coltham Lane,
Bristol.

February 13th, 1894.

To, The Librarian,

British Medical Association

429 Strand, London, W. C.



Dear Sir,

I send, as requested, copy of my annual report for 1893, although I am convinced it is not worth the sending as it had to be written under many difficulties, and continuous interruptions. I would have revised and improved the text, but find the work impossible. Such as it is I forward it with sorrow for its abounding imperfections.

I am,

Dear Sir,

Yours very truly,
George Wilson.

Medical Officer of Health to the Coltham Rural Sanitary District in the County of Somerset.

Annual Report of the "Medical Officer" of the 15th Clinton
Sanitary District, for the year ended December 31st, 1893.
Gentlemen, The following are the materials of this Annual Report.

§ 1. Population.

The Population of this Sanitary District may be supposed to be stationary. What the Population was at the census of 1880, may be taken to be the same now. This is estimated at 16425 persons. What the relative proportions of the sexes may be, it is not easy to ascertain.

§ 2. Vital Statistics.

During the year 1893 there were registered a total of 515 births, of which 254 were males and 261 were females. This gives an annual rate of 31.354 per 1000 of Population throughout the District. During the same period, there were registered a total of 275 deaths, which gives an annual rate of 16.742 per 1000 of Population throughout the entire District. These are the General rates. If now, we subdivide these rates according to the several registration sub-districts we shall gain a closer insight into the relative contribution of each sub-district to these rates. There are four registration sub-districts which are named, respectively, the Harpree, Chen Magna, Clulton, and Midowner Norton. These districts differ widely in area and the character of its Population. We will begin with the Harpree sub-district. This contains eight Parishes and one hamlet, with a Population of 2694 persons, entirely given to Agriculture. This sub-district registered a total of 67 births and 55 deaths, giving an annual rate of 24.83 per 1000 of the Population of this sub-district for the former, and of 20.416 per 1000 per annum for the latter. Lung diseases constitute the chief ingredient in the mortality, 17 of the total deaths being due to this source - amounting to nearly one third of the whole. In Quercy, as such, occasioned two deaths. The "epidemic constitution" of the year was essentially that of Influenza; so there is nothing surprising in coming upon deaths from Influenza. One death was due to Child-birth - the infant dying as well: In one Parish - Camelay - small pox was regarded as an epidemic; otherwise there was an entire absence of disease of any infectious character. Of the total number (55) of deaths, 10 occurred in children under 5 years of age, and 22 of persons over 65 years of age and upwards - the former being less than one-sixth of the total (local) mortality, and the latter rather more than two-thirds of the whole. Of the total deaths in this sub-district 29 were males and 26 were females.

The next registration sub-district is that of Chew Magna; this consists of seven Parishes covering an area of 12795 acres and containing a Population of 3661 persons. This, also, is essentially an agricultural district; but a portion of the large Parish of Chew Magna called Bishop Sutton contains one village, and the Population of this hamlet are 1311 persons. During the year, the number of births registered in this sub-district 99, and the deaths 60. The former gives an annual rate of 27.04 per 1000 persons in this sub-district, and the latter the annual rate of 16.39 per 1000. Here we see a considerable advance in the birth-rate above that of the preceding sub-district in the proportion of 27.04 to 24.83: this being undoubtedly due to the small village Population existing in Bishop Sutton - a part of the Parish of Chew Magna. We shall see hereafter in of the same order. Of this total of 60 deaths, 11 were of children under 5 years of age, and 20 of persons 65 years old and upwards: in other words the former contributed nearly one-sixth of the total (local) deaths, and the latter one-third. In the Parish of Chew Magna itself, the village proper, Diphtheria occasioned ^{two} deaths, and what is called "Membranous Laryngitis", one. In the same, with its ^{pulmonary} sequelae, caused seven deaths: Childbirth ^{two}. The Parish of Norton, one of the constituents of this sub-district, with a Population of nearly 500 persons had but two deaths during the whole year - both these being due to Diphtheria. Which was unhappily imported into it by two boys who carried newspapers for sale, and who introduced it into their own families. No other house or family had a single case. But for this accident, there would not have been a single death in this whole Parish. Two deaths were due to Injuries. Norton Bankfield had no deaths; and Norton Malrewood only one. Scarlatina was rather prevalent at Stanton Drew which occasioned no death. Acute Rheumatism caused 2 deaths. The remaining causes of Death require no particular enumeration at this time.

The next registration sub-district is Clutton. This contains 6 Parishes, of the total number of Deaths there were 36 Males and 24 Females. which covers an area of 7584 acres, and contains a Population of 6610 persons. In this sub-district is situated the Union Workhouse & a small Cottage Hospital for cases of accidents. There are 5 villages located in this district, two being situated at Paulton, two at Timbory, one at High Littleton Clutton. These villages give employment to, perhaps, one

half of the male population of this sub-district. We have accordingly a "mixed" population of agriculturists - much the fewest, Colliers, much the largest, and factory hands which work at a boot and shoe factory situated at Paulton. Paulton, a constituent of this sub-district with the smallest acreage (1060) has the largest Population (2301), and contains within its boundary a small Cottage Hospital, a large Factory, and two coal mines. The total number of births registered during the year was 232, and the total number of Deaths 114. These give a rate of 33.43 per 1000 per annum of the Population, for the former, and of 17.24 per 1000 per annum for the latter. Here, then, we observe a considerable rise in the birth rate, no doubt due to the large increase of the Colliery element. Of the total (local) deaths, 32 occurred in children under 5 years of age, and 47 of persons over 65 years and upwards. In other words, more than one half of the total deaths occurred at the two extremes of life. We also note for the first time the enormous increase of infantile deaths, whereas we observe a corresponding decrease of deaths at the opposite term of life; in other words more infants died during the year in this sub-district and fewer old persons, than in the two preceding sub-districts. Again, we would expect several deaths due to injuries, as work in Collieries is always more or less attended with danger; as a matter of fact we had but one, and this not due to Colliery agency. Scarlet fever raged as an epidemic in Clutton, Paulton, and Tinsbury, accordingly, we find 10 deaths due to this fever, Diphtheria caused three deaths, Laing's pneumonia one, Influenza and its Sequelae 10, Child birth 2 - but these attributable to Influence of a complicated with Pneumonia. Enteric fever caused one death. The Work-house sustained 18 deaths, the Cottage Hospital two. The remaining causes of Death need no further remarks. Of the total (local) deaths 55 were those of males and 59 those of females.

The fourth and last registration sub-district is Midlammer - Norton. This only contains four Parishes, two of which are agricultural and two Colliery. It contains 5180 acres and ^{a Population of} ~~contains~~ 3460 persons. Its population however is very unequally distributed, for whereas the agricultural portion numbers some 1000 persons, the remainder (2460) is made up by the Colliery. If, then, the view of the connection between a high rate and the character of the population be correct, we ought in this sub-district in which the Colliery element largely

in the proportion of 2.5:1,
here/understand to see a proof of this: accordingly we see an advance in this
proportion ^{respect to} of 2.5:1. There were registered during the year 117 births and 46 deaths,
thus giving an annual rate of 33.81 per 1000 of population in the former, and
of 43.26 per 1000 for the latter. Here we see the highest proportional birth-rate
in a district chiefly composed of Catholics, Clifton coming next, also, large of
a Catholic one; the two agricultural sub-districts coming lowest. Of the 46 deaths
registered, 8 were under 5 years of age, 7 over 65 years of age and upwards. Two
deaths were due to scarlatina - scarlet fever had been somewhat prevalent
in the Parish of Camerton; two deaths were due to infectious fever, one to fasti-
tis, one to Acute Laryngitis, four to Infuenza and its sequelae, two were due
to Injuries - both Catholic. One death was due to Scabies - the only death from
this cause throughout the entire sanitary district for the whole year. Having now
given a short summary of the vital statistics of each of the four registration
sub-districts in succession, we shall next group together the principal facts
for the entire district, by way of recapitulation. We have seen that the total
population of the entire district was 16425; that the total number of births
was 515, and the total number of deaths registered was 275. The former
gives an annual rate of 31.354 per 1000 of population for the whole dis-
trict, and the latter one of 16.742 per 1000 per annum. The births are
to the deaths in the proportion (nearly) of 2:1. The number of children
under 5 years of age which died during the year was 65 or rather more
than $\frac{1}{4}$ (4.23) of the total deaths. Infants under one year old which died were
39 were $\frac{1}{3}$ of the total deaths. As the number of births was 515 and the number
of deaths under one year was 39, it follows that a little over $\frac{1}{13}$ (13.2) of the
total number born during the ^{first} year of birth. The number of persons over
65 years of age who died was 102 or somewhat ^{more} than one half (2.7) of
the total deaths. Of the total number of deaths 146 were males, and ~~and~~
129, were females. Of the total number of births 256 were males
and 261 were females. Considering that the female population is in ex-
cess, these proportions are about equal. As the causes of death ~~rather~~ need
be said. Scarlatina occasioned the deaths of, nearly $\frac{1}{20}$ of the total mor-
tality. Diphtheria caused 7 deaths, two of these being at Chew Magna, two
at Paulton, two at Piblow, and one at High Littleton. All the couples were
in the same house and family, respectively; this mortality is $\frac{1}{4}$ of the whole.
one death was due to Membranous Croup at Chew.

Enteric fever caused three deaths whose origin and history is unknown. One occurred at Farmborough, one at Camerton, and one at Farningham. It is rather remarkable, in this connection, that there was a case of acute enteritis at ~~Farningham~~ ^{Camerton}, one of acute enteritis at Farningham, and also one in the adjoining parish of Stone Easton, as these causes were in action other than those of specific character to produce allied diseases. It may also be noted that Scarlet fever seems to have served as the connecting link between Erysipelas on the one hand and Diphtheria on the other. Although no death was due to Erysipelas, yet a large number of cases of this specific disease were notified. In one house where two deaths were due to Diphtheria, the last case in it was one of Scarlet fever. In another house where eight persons successively suffered from Scarlet fever, the last case in it ended in Erysipelas. Only a single death is due to Scarlatina. Rheumatic fever with its sequelae (Endocarditis & Pericarditis) caused three deaths. Influenza occasioned 23 deaths with its pulmonary complications. Tergiversimus striolus had one death. Typhoid caused eight deaths. Child abject with its consequences (not necessary ones) produced five deaths - two being succeeded by Influenza with Pneumonia, one due to Puerperal Convulsions, one to Consequential Meningitis, and one to enteritis with Syncope. Premature (with its involving in its train Congenital Debility, Inanition, Imperfect Development, Marasmus, occasioned 18 deaths or more than $\frac{1}{5}$ of the whole. One infant died of hereditary Syphilis. If asked what was the medical characteristic of the year, the answer would be the epidemic prevalence of Influenza, and the entire absence of Scarlatina. The remaining deaths may be passed over.

§ 3. Movement of Specific Diseases.

There were notified during the year 328 cases of infectious disease, viz 4 of Small-pox, 276 of Scarlet fever, 17 of Diphtheria, one of Membranous Croup, 4 of Enteric fever, 2 of Puerperal fever, and 24 of Erysipelas. We observed in place the enormous preponderance of Scarlet fever cases. We have already remarked upon the close relationship which obtains between Scarlet fever and Erysipelas. If we bracket these together we get a total of 300 cases, leaving but a small residuum in the remainder. It will not be necessary to make a separate observation on each of these causes. We desire to note only briefly the sanitary condition of the Parishes affected. Small-pox, this disease had been for some time prevalent in its neighbourhood; it was not

until the 11th of December that we had our first case. This was in a lad who was of previous
time to a blacksmith living at Kingswood where the disease was fiercely raging at the
time. On the 11th he returned to his father's house at Chew Magna with the disease fully
out upon him. In this exposed state he travelled by train, by rail and by fly to his
father's house. He had not been anywhere (to his knowledge) where small-pox
was present, but many persons had had it and died. He stated his own master
had been very ill a week before he himself died. It is, therefore, highly
probable the master had a touch of the disease from whom the apprentice
took it. Whilst at home he was nursed by his own mother who herself took
the disease from him. This, I consider, was due to two causes: 1^o To unne-
cessary delay in being revaccinated; and 2^o To not being sufficiently
in the open air to dilute and carry off the poison from the clothes and
persons. His mother and lad recovered and the disease did not ex-
tend beyond the precincts of this particular house. The next group of
cases occurred at Farrington Burney, a village 12 miles from
Bristol. On December 29th I received a note from a patient stating with a query, that
there were two cases in one family. One was a young man (a collier) who was suffer-
ing from a modified attack; the other was his mother with a very severe
confluent one. On inquiring I learned that the father of this young man had
himself had what purported to be a mild attack of the same disease
about four weeks previously. None of these parties had been away from
home, and no visitors had been received from Bristol or elsewhere.
How then came the disease to be introduced into this household? On the 20th
of November previous a young man named Lumber, a drainer by
trade, was admitted into the Shepton Mallet Infectious disease Hospital
but suffering from small-pox. This man slept at a small inn the
night before his admission into hospital, in the adjoining Parish of Paulthorpe.
As he was received into hospital on the 20th he must have passed through
Farrington on his way to Shepton, as this is the direct road to the latter
place. On his way to Shepton he stayed at the Farrington Inn for refreshment
where he met the father of the above household. Here then was the
source of infection. Observe the dates: Nov- 20th received into Shepton
Mallet Hospital; on 19th slept at Paulthorpe; on 20th stopped at Farring-
ton Inn. On Dec- 1st or 2nd the father first taken ill, leaving a period

4) about 10-12 as the period of incubation - 6) course the father infected. At the
 same time his wife, for both these died on the self-same day, viz on the 22nd.
 The father and son having very mild modified attacks of the disease
 both recovered, whereas the unfortunate wife whose case was a confluent one
 with severe lung complication, died on the 31st. She was evidently very
 susceptible indeed to the Varicellous poison for she had had the disease once
 before; and, what is inexplicable, the self-same source of infection,
 which was a very mild form of the modified disease, gave her in rather
 produced in her a most virulent ^{or acted upon her as} poison. No other case occurred in
 this Parish where we have a Scarlet fever: 276 cases were notified; this dis-
 ease occurred in an epidemic form at Caineley (Temple Cloud), Clutton,
 Paulton, Tinsbury, Camerton, and Stanton Drew. We have seen that
 Scarlet fever occasioned 14 deaths which is equivalent to 5 percent of the
 notified cases and 1/20 of the total deaths. In consequence of the wide
 spread of this disease, it was deemed prudent to close some of the elementary
 schools; these were Temple Cloud, Clutton, two at Paulton. Diphtheria had
 17 cases notified; these cases occurred at Chew Magna, High Littleton, Paulton,
 Caineley, and Paulton. Eight of these occurred at Chew Magna, and four at
 Paulton, making two-thirds of the total cases. There can be no doubt there had
 been for some time had cases of wife disease sore throats without medical attend-
 ance. The first death that occurred was in a young girl 6 years old living at Knute-
 Hill with her parents - a hamlet about one mile from the village of Chew. This
 child had been nowhere away from home, nor had any visitors called
 at the house to see her - although it was a public house - save one person.
 The child did not attend the school at Chew, but a young person, a governess
 at that school, went to Knute to teach her. This young ^{wo} man had a very
 bad throat at the time she went to teach her pupil: the pupil in turn took
 the infection whatever it was. But events soon showed this, for the child de-
 veloped what was called "Membranous Laryngitis" from which she died on
 the 26th of Sept, after a weeks illness. A woman living opposite nursed this
 child and waited upon her in her last days; she had a severe attack of gen-
 uine Diphtheria. Another little girl living a few doors above called to see
 her just before her death; she too, had a very bad throat, but no one attended
 her medically. This girl afterwards attended the Board School at Chew

and was undoubtedly a source of infection to all who attended this school, for after this we find cases breaking out here and there in the village of Chew. In Chew itself there were ~~seven~~ ^{eight} cases with three deaths (including this case of Membranous Croup as one). The Table A shows two deaths as occurring at Publow, another Parish three miles off. Both these were fatal cases and occurred in the same house and family. One of the boys of this family was in the habit of carrying newspapers for sale from Penrford to, amongst other places, Chew. On his round he used to call at one cottage which was occupied by a woman who nursed a family living next door but one to her, of Diphtheria. She was a dirty woman, and her stuff gown, which she never changed, must have been saturated with the excretions of those persons she attended to. This boy came into direct contact with this woman in delivering her her copy of the paper. This was the only known source of infection from which he could possibly have been affected. He took the disease, and in turn affected his sisters and brother. He himself died and one of the sisters which are the two deaths in question. Another boy, living a few doors above, used to accompany him in his rounds, also selling newspapers. He also took the disease and communicated it to his brethren, but all these recovered. At Paulton there were two fatal cases in one house. The first of the two cases was supposed to have been occasioned by the boy having bathed in a very filthy pool and drank some of the foul water. His brother took the disease from him, but died. The Privy in the rear of the cottage was in a very offensive & ~~stagnant~~ condition, and smelt abominably. Were these really cases of Diphtheria? There had been an epidemic of Scarlet fever at Paulton in some time before; and, it also happened that one more case broke out in the same house after these fatal ones and this was notified as Scarlet fever. One fatal case of Diphtheria occurred at High Littleton of which nothing is known. The case of "Membranous Croup" (only measured) has already been disposed of in the introductory remarks to Diphtheria. Puerperal fever; two cases were notified of this formidable disease, one of them being at the Union Workhouse, and one in Clutton itself. These occurred in the practice of the same medical man. There are four cases of Enteric fever; nothing is known of the origin of these cases; only, it is to be noted that we had fastidias, acute enteritis, (allied diseases) in the selfsame

Parishes in which the former occurred; probably ^{some} ~~and~~ general source of activity for these abdominal affection's. Lastly: there were 24 cases of Erysipelas; this is a large number. It is probable many of these cases were forms of Scarlet fever, for we have already seen how often one seemed to be substituted for the other, in the same house and family.

The following was the incidence of infectious disease arranged to the extent of frequency in the several registration sub-districts:—

- 1st Chew Magna; Population, 3661; notified cases 41.
- 2nd Midlawmer Norton; Population, 3460; notified cases 43.
- 3rd Keapthorpe; Population, 2694; notified cases 51.
- 4th Clutton; Population 6610; notified cases 192.

N. B. In Table B. the ages of the notified cases are not given because in no case does the medical attendant specify age.

§4. Meteorology.

The Meteorology of the year 1893 is somewhat remarkable; a mild winter was succeeded by a hot and dry spring and summer, which, in its turn was followed by a warm and very wet autumn. Yet the year was remarkable for the great amount of disease of the respiratory organs which prevailed, chiefly of a specific nature. Seventy deaths are recorded under this head alone more than ^{than} one quarter of the deaths from all causes. Influenza contributed largely to this head. During the year there was a general expectation of the advent of Cholera; and preparations were made on an extensive scale to meet it. Yet the past history of Influenza and Cholera both show that Influenza always precedes Cholera, never Cholera, it. Moreover the two diseases are never synchronous in operation, but one is antecedent, the other consequent—always, as, then, Influenza was already in possession it was contrary to all precedent to expect Cholera too, the two diseases never coexisting together in the same place. I, for one, never expected Cholera would come as an epidemic, because it was contrary to the natural history of the disease to do so. And although much boast was made of stamping it out wherever it planted itself, there is no evidence whatever that had it been left to take its usual course, it would have done more than produce a few sporadic cases, because the season of Cholera was not yet. Undoubtedly, it is not the prepared in every essential by timely and well ordered preparation, and this was accordingly done. All this, notwithstanding,

we ourselves were under no ^{sense of} alarm or apprehension having full faith in the teachings of Influenza and Cholera for the last hundred years. Another phenomenon of Cholera is Diarrhoea; how do we stand about this? Just one death during the whole year, and this of an infant 6 months old, the smallest Diarrhoea mortality we ever had. This certainly did not forebode Cholera. The "epidemic constitution" of the year predicted as plainly as anything possibly could that this was not a Cholera year for England; and events have conclusively shown the accuracy of this view.

D.S. Sanitary Proceedings.

No new works of Sewerage or Water Supply were inaugurated in our district. The season was an exceptionally dry one; and although much inconvenience was experienced in certain Parishes from want of water, yet a sufficient supply was somehow obtained, and no harm to the public health occurred from this scarcity. Indirectly, the sewers and drains were liable to become a nuisance from insufficiency of water to flush them; but, no injury arose thereby. In former annual reports we have pointed out the difficulty of procuring adequate supplies of pure and wholesome water for certain contributory places. This difficulty still exists. So with regard to sewer construction, repairs, and the disposal of sewage. Then again as to Houses, these would be exceedingly scarce but for the fact that rural places are being slowly depopulated. Hence the supply is about equal to the demand; but the quality is not good, as most of the cottages are old and ruinous. New houses are gradually springing up, especially in places where population is increasing as at Paulton where the factory engages a large number of hands, and in the neighbourhood of coal mines. The older houses are being slowly repaired and made more habitable. The Housing of the Working Classes Act is a very difficult and cumbersome matter in rural districts, as there is an efflux rather than an influx of the people this difficulty is somewhat kept within bounds. Should the opposite condition of things happen the matter would be serious indeed. We must "hasten slowly" and be thankful for small mercies. Inspections; these were systematically carried out, but chiefly with reference to special requirements. Thus, e.g. the extensive prevalence of Scarlet fever, Diphtheria, Small-pox, and Enteric fever necessarily engaged a

large amount of attention. Parishes so fortunate as to be free from infectious disease, as a matter of prudence had less attention. This could not well be otherwise. Slaughtermans, butchers, and dairies had special attention directed to them. Scarlet fever being so extensively prevalent, and some of the cases occurring in farmhouses, it became a matter of urgency to look to the dairy arrangements with a view to protecting the milk from infection. In no case did we find the dairy to be compromised. The dairies in Somerset are proverbial for their cleanliness and good order; and although many of the farmhouses are old and dilapidated yet the dairies are always found clean and wholesomely kept. No doubt, here and there, there is room for improvement, but with every drawback, no case has arising of infectious disease has been propagated through the instrumentality of dairies. A very good custom obtaining with some farms never to bring the dairy milking into the dwelling house; hence, when Scarlet or any other fever breaks out in such an establishment, it is not at all likely the milk supply, ^{with the exception} provided the inmates take no part in either milking or in preparing milk for sale. There is one factory in the district situated at Paulton. as before stated this is engaged in the boot and shoe trade. During the year the Home Secretary required a list to be made and kept of "out-workers" in certain specified trades. Accordingly, it became a part of our duty to go into this matter. The "Businesses" scheduled in the order of the 31st of October, 1892, cannot surely be said to exist in the district, except if it be in the manufacture of articles of wearing apparel. ... A most important part of public hygiene, the quality of the water used for domestic consumption stands high. We have always made it a point of duty of examining from time to time the quality of the water so used, especially in suspected cases. I make it a rule always to examine the particular supply in every case of Enteric fever, Typhoid, and certain cases of Erysipelas. From recent proceedings I fear this practice is likely to receive a check, as the Sanitary Authority has instructed the Inspector of Nuisances to collect samples whenever he thinks necessary, and to forward same to me for analysis. As this is left to the mere opinion and discretion of a single person, I fear I am not likely to be burdened with much work on this score. As, moreover, he may be swayed by other influences than those arising from his private judgment, it is to be expected that the new mode of procedure will not be a striking success - nay rather that it may prove a detriment to the sanitary well-being of the district. However, we must wait for time for its development.

This is what may be termed sacrificing the teaching of science to mere expediency. "Infectious Disease"; when any breaks out in a house the first question naturally arising is - "How shall it be treated?" In the majority of cases - perhaps in every case - the removal of the healthy from the infected would meet the case. Unfortunately, it is not always easy to fulfill this condition. An Infectious Diseases Hospital would not always meet the case, nor is it the panacea some enthusiasts imagine it to be. In rural districts such a structure would be shut up for more than half a year, in ordinary years; and the other half would be useless to the remote parts of the district. Did the Sanitary Act provide for the removal, housing, and maintenance of non-infected members of a household, the case would be completely met. But the Act does not provide, specifically for such cases. What is really wanted is the provision of a fund for maintaining the portion of the family sent away. Other than the Poor Law, for want of such a fund we cannot adequately cope with infectious disease in the manner we otherwise should. "Disinfection"; when infectious disease has terminated in a house or family ^{then} comes the question of disinfecting roads and premises. This, again, is often a difficult matter. Here the Infectious Diseases (Prevention) Act, 1890, gives the power of providing for the maintenance of the family removed from their home for the purpose of more readily disinfecting the premises. From the extreme scarcity of house accommodation it is next to impossible to secure premises for this purpose. If a similar provision were made for maintaining a family for purposes of "isolation" as well as for "disinfection", all would be obtained that is required. Overcoming; no case was brought forward requiring intervention. The "Notification" Act, 1889, came into operation in the beginning of the year 1892. This Act gives a great deal of work to the medical Officer in regard to schools - their closure, and the attendance of scholars who may be absent on account of infectious disease. Work was very slack during a great portion of the year, in the summer from the failure of the hay crops, and in the autumn from the coal strikes. This being essentially a dairy district, and also a coal district - these elements were necessarily very serious. Nevertheless, although shortness and slackness of work meant privation to some extent, yet through the administration of the Poor Law and other philanthropic agency all wanted was met, and no evil ensued to the public health. Such is a brief history of the sanitary events of the year. We have not progressed, I trust, we have not retrogressed. We have about held our own. I am,

February 10th, 1894. Gentlemen, Your Obedient Servant - George Wilson -

K² 3.
(A)

TABLE OF DEATHS during the Year 1893, in the Rural Sanitary District of Clutton, in the County of Somerset, classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purposes of these Statistics; public institutions being shown as separate localities. (See note 4 on back of sheet). (Columns for Population and Births are in Table B.) (a)	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																								
	At all ages.	Under 1 year.	1 and under 5	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwards.	(i)	1 Smallpox.	2 Scarlatina.	3 Diphtheria.	4 Membranous Croup.	FEVERS.						10 Cholera.	11 Erysipelas.	12 Measles.	13 Whooping Cough.	14 Diarrhea and Dysentery.	15 Rheumatic Fever.	16 Ague.	17 Phthisis.	18 Bronchitis, Pneumonia, and Pleurisy.	19 Heart Disease.	20 Injuries.	21 All Other Diseases.	22 Total.	
													5 Typhus.	6 Enteric or Typhoid.	7 Continued.	8 Relapsing.	9 Puerperal.															
East Harphree.	15	2	1	1	2	3	6	Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3
West Harphree.	6	-	-	-	-	4	2	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1
Compton Martin.	9	1	3	-	1	4	-	Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2
Ubley.	6	-	-	-	-	2	4	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3
Nempanett.	1	-	1	-	-	-	-	Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Litton.	3	-	-	1	-	-	2	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Widcombe.	-	-	-	-	-	-	-	Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Camelley.	9	1	1	1	-	3	3	5 upwds.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
Hinton Blewett.	6	-	-	-	-	1	5	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1
Farrington Gurney.	6	-	1	-	1	1	3	5 upwds.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Stone Easton.	6	-	1	2	-	3	-	5 upwds.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Chilcompton.	6	2	-	-	1	-	3	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2
Camerton.	28	5	3	-	1	12	7	5 upwds.	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	3	1
Stanbury.	13	1	-	-	-	8	4	5 upwds.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Publow.	2	-	1	1	-	-	-	5 upwds.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Norton Malvern.	1	-	-	-	-	-	1	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Norton Hawkfield.	-	-	-	-	-	-	-	Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Stowey.	4	1	-	2	1	-	-	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Chew Magna.	27	3	2	6	1	5	10	5 upwds.	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5
Chew Stoke.	13	2	1	2	-	3	5	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3
Clutton.	13	4	4	-	-	2	3	5 upwds.	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8
Chelwood.	-	-	-	-	-	-	-	Under 5	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5
High Littleton.	14	3	1	1	-	3	6	5 upwds.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4
Farmborough.	17	7	1	-	2	2	5	5 upwds.	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8
Junistbury.	24	4	-	1	2	8	9	5 upwds.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4
Paulton.	26	1	5	2	1	5	12	5 upwds.	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6
Cottage Hospital (Paulton).	2	-	-	-	2	-	-	Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Workhouse (Clutton).	18	2	-	-	1	4	11	5 upwds.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
TOTALS	275	39	26	20	16	73	101	Under 5	-	11	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
								5 upwds.	-	3	5	1	-	4	-	-	-	-	-	-	-	1	-	-	-	2	12	2	-	30	65	

George Wilson.
Medical Officer of Health.
February, 1894.

